

## Low Loss RA SMA Male to TNC Male Cable LMR-240-UF Coax in 100 CM with Times Microwave components

The RA SMA male to TNC male 100 cm cable using LMR-240-UF coax, part number FMC00242-100CM, from Fairview Microwave is in-stock and ships same day. This Fairview SMA to TNC cable assembly has a male to male gender configuration with 50 ohm flexible LMR-240-UF coax. Fairview Microwave's flexible RF cable assemblies are ideal for applications where tight bends and continual flexure are required. The FMC00242-100CM SMA male to TNC male cable assembly operates to 5.8 GHz. The right angle SMA interface on the LMR-240-UF cable allows for easier connections in tight spaces. The double shielding of this Fairview cable assembly provides excellent shielding effectiveness of better than 90 dB.

Custom versions of most RF cable assemblies can be built and shipped same day. Custom cable assembly lengths can be obtained by specifying the desired length on the web site at time of order or by contacting a sales representative. Other RF cable assembly value added services including connector orientation or clocking, heat shrink booting and labeling are also available. RF testing can also be performed to document the electrical performance of your cable assembly.

## **Electrical Specifications**

Description	Min	Т	ур	Max	ι	Jnits	
Frequency Range	DC			5.8		GHz	
VSWR				1.4:1			
Velocity of Propagation		8	34			%	
RF Shielding	90					dB	
Group Delay		1.21	[3.97]		ns/f	t [ns/n	n]
Capacitance		24.2	[79.4]		pF/f	t [pF/r	n]
Inductance		0.06	0.2]		uH/f	t [uH/r	n]
DC Resistance Inner Cor	nductor	4.28	[14.04]		Ω/100	Oft [Ω/	Km]
DC Resistance Outer Cor	nductor	3.89	[12.76]		Ω/100	Oft [Ω/	Km]
Jacket Spark				5,000	١	/rms	

### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	0.25	0.5	1	2.5	5.8	GHz
Insertion Loss (Typ.)	0.45	0.52	0.61	0.81	1.1	dB

#### **Electrical Specification Notes:**

The Insertion Loss data above is based on the performance specifications of the coax cable and connectors used in this assembly. The Insertion Loss includes an estimated insertion loss of 0.1 dB for the straight connector and 0.2 dB for the right angle connector

### **Mechanical Specifications**

#### **Cable Assembly**

Length\* 39.37 in [100 cm]

#### Cable

Cable Type LMR-240-UF

## FMC00242-100CM DATA SHEET



## **Configuration:**

- SMA Male Right Angle
- TNC Male
- LMR-240-UF

### Features:

- Max Frequency 5.8 GHz
- Shielding Effectivity > 90 dB
- 84% Phase Velocity
- · Double Shielded
- TPE Jacket

## **Applications:**

- General Purpose
- Laboratory Use

Fairview Microwave 301 Leora Ln., Suite 100 Lewisville, TX 75056 Tel: 1-800-715-4396 / (972) 649-6678

Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





Impedance Inner Conductor Type Inner Conductor Material and Plating

Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 Jacket Material

Jacket Diameter

One Time Minimum Bend Radius Repeated Minimum Bend Radius Bending Moment

Flat Plate Crush Tensile Strength 50 Ohms Stranded Copper PE (F) 2

Aluminum Tape Tinned Copper Braid

TPE, Black

0.24 in [6.1 mm]

0.75 in [19.05 mm] 2.5 in [63.5 mm] 0.13 lbs-ft [0.18 N-m] 13 lbs/in [0.23 Kg/mm]

80 lbs [36.29 Kg]

#### **Connectors**

Description	Connect	or 1	Connector 2		
Туре	SMA Ma	TNC Male			
Impedance	50 Ohr	ns	50 Ohms		
Mating Cycles			500		
Contact Material & Plating	Beryllium Cop	per, G	old Phosphor Bronze, Gold		
Contact Plating Spec.			50μ in. minimum		
Dielectric Type	PTFE		PTFE		
Outer Cond Material & Plati	Material & Plating Brass, Nickel		Brass, Tri-Metal		
Body Material & Plating	Brass, Ni	ckel	Brass, Tri-Metal		
Body Plating Spec.			80μ in. minimum		
Coupling Nut Material & Plating Brass, Tri-Metal					
Coupling Nut Plating Spec.	. 80µ in. minimu				
Hex Size	5/16 in	ch			
Torque		20 in-lbs 2.26 Nm			
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### Mechanical Specification Notes:

## **Environmental Specifications**

**Temperature** 

Operating Range -40 to +85 deg C Storage Range -70 to +85 deg C

**Compliance Certifications** (see product page for current document)

#### **Plotted and Other Data**

Notes:

<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.





#### **How to Order**

Part Number Configuration:	FMC00242 -	XX	uu	
				cm = Centimeters <blank> = Inches</blank>
		l		Length

Example: FMC00242-12 = 12 inches long cable FMC00242-100cm = 100 cm long cable

Low Loss RA SMA Male to TNC Male Cable LMR-240-UF Coax in 100 CM with Times Microwave components from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Low Loss RA SMA Male to TNC Male Cable LMR-240-UF Coax in 100 CM with Times Microwave components FMC00242-100CM

URL: https://www.fairviewmicrowave.com/low-loss-ra-sma-male-tnc-male-cable-Imr240uf-coax-fmc00242-100cm-p.aspx

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

301 Leora Ln., Suite 100, Lewisville, TX 75056 | Tel: 1-800-715-4396 / (972) 649-6678 / Fax: (972) 649-6689



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